What is claimed is:

1. A fluorescent-light image display method comprising

obtaining a fluorescent-light image based on the strength of fluorescent-light emitted from a target area upon irradiation thereof by a stimulating-light,

assigning at least one of color data and brightness data to a computed-image based on said fluorescent-light image and forming a tissue-state image representing mainly the state of the tissue in the target area

assigning to said fluorescent-light image at least one of color data and brightness data corresponding to the color data and the brightness data assigned to said tissue-state image and forming a tissue-form image representing mainly the form of the tissue in the target area

combining the tissue-state image and the tissue-form image to form a composite-image, and

displaying the composite-image.

2. A fluorescent-light image display method as defined in claim 1, wherein

the computed-image is based on the ratio of one to another of two wavelength components among a plurality of wavelength components of said fluorescent-light image, each of said wavelength components representing a different wavelength band of fluorescent light.

3. A fluorescent-light image display method as defined in claim 1, further comprising

computing a statistical quantity of the pixel values of one of the obtained images and assigning display gradation of the brightness data based on said statistical quantity.

4. A fluorescent-light image display method as defined in claim 3, wherein

the statistical quantity is computed from a desired portion of said one of the obtained images.

5. A fluorescent-light image display method as defined in claim 3, further comprising

computing a predetermined coefficient based on the statistical quantity,

multiplying said one of the obtained images by said computed coefficient, and

assigning said display gradation of the brightness data to said one of the obtained images that has been multiplied by the coefficient.

6. A fluorescent-light image display method as defined in claim 3, further comprising

determining a gradation processing function representing the display gradation of the brightness data based on the statistical quantity, and

assigning the display gradation of the brightness data, based on the determined gradation processing function, to said one of the obtained images.

7. A fluorescent-light image display method as defined in claim 1, wherein

the color data is a chromaticity occurring in a color mixing system or a color appearance system, each being one of color specification systems.

8. A fluorescent-light image display method as defined in claim 1, wherein

the brightness data is a degree of brightness according to a color mixing system or a color appearance system, each being one of color specification systems, or luminance according to an image signal system.

9. A fluorescent-light image display method comprising

obtaining a fluorescent-light image based on strength of the fluorescent-light emitted from a target area upon irradiation thereof by a stimulating-light,

obtaining a reflected-light image based on strength of reflected-light reflected from the target area upon irradiation thereof by a reference light,

assigning at least one of color data and brightness data to a computed-image based on said fluorescent-light image and forming a tissue-state image representing mainly the state of the tissue in the target area

assigning to said reflected-light image at least one of color data and brightness data corresponding to the color data and the brightness data assigned to said tissue-state image and forming a tissue-form image representing mainly the form of the tissue in the target area

combining the tissue-state image and the tissue-form image

to form a composite-image, and

displaying the composite-image.

10. A fluorescent-light image display method as defined in claim 9, wherein

the computed-image is based on the ratio of one to another of two wavelength components among a plurality of wavelength components of said fluorescent-light image, each of said wavelength components representing a different wavelength band of fluorescent light.

11. A fluorescent-light image display method as defined in claim 9, wherein

the computed-image is based on ratio between said fluorescent-light image and said reflected-light image.

12. A fluorescent-light image display method as defined in claim 9, further comprising

computing a statistical quantity of the pixel values of one of the obtained images and assigning display gradation of the brightness data based on said statistical quantity.

13. A fluorescent-light image display method as defined in claim 12, wherein

the statistical quantity is computed from a desired portion of said one of the obtained images.

14. A fluorescent-light image display method as defined in claim 12, further comprising

computing a predetermined coefficient based on the statistical quantity,

multiplying said one of the obtained images by said computed coefficient, and

assigning said display gradation of the brightness data to said one of the obtained images that has been multiplied by the coefficient.

15. A fluorescent-light image display method as defined in claim 12, further comprising

determining a gradation processing function representing the display gradation of the brightness data based on the statistical quantity, and

assigning the display gradation of the brightness data, based on the determined gradation processing function, to said one of the obtained images.

16. A fluorescent-light image display method as defined in claim 9, wherein

the color data is a chromaticity occurring in a color mixing system or a color appearance system, each being one of color specification systems.

17. A fluorescent-light image display method as defined in claim 9, wherein

the brightness data is a degree of brightness according to a color mixing system or a color appearance system, each being one of color specification systems, or luminance according to an image signal system.

18. A fluorescent-light image display apparatus comprising

fluorescent-light image obtaining means for obtaining a

fluorescent-light image based on the strength of fluorescent light emitted from a target area upon irradiation thereof by a stimulating-light, and

tissue-state image forming means for assigning at least one of color data and brightness data to a computed-image based on said fluorescent-light image and forming a tissue-state image representing mainly the state of the tissue in the target area, and

tissue-form image forming means for assigning to said fluorescent-light image at least one of color data and brightness data corresponding to the color data and the brightness data assigned to said tissue-state image and forming a tissue-form image representing mainly the form of the tissue in the target area, and

composite-image forming means for combining the tissue-state image and the tissue-form image to form a composite-image, and

display means for displaying the composite-image formed by said composite-image forming means.

19. A fluorescent-light image display apparatus as defined in claim 18, wherein

the computed-image is based on the ratio of one to another of two wavelength components among a plurality of wavelength components of said fluorescent-light image, each of said wavelength components representing a different wavelength band of fluorescent light.

20. A fluorescent-light image display apparatus as defined in claim 18, further comprising

statistical-quantity computing means for computing a statistical quantity of the pixel values of one of the obtained images, and

gradation processing means for assigning display gradation of the brightness data based on said statistical quantity.

21. A fluorescent-light image display apparatus as defined in claim 20, wherein

said statistical-quantity computing means computes the statistical quantity from a desired portion of said one of the obtained images.

22. A fluorescent-light image display apparatus as defined in claim 20, wherein

said gradation processing means computes a predetermined coefficient based on the statistical quantity, multiplies said one of the obtained images by said computed coefficient, and assigns said display gradation of the brightness data to said one of the obtained images that has been multiplied by the coefficient.

23. A fluorescent-light image display apparatus as defined in claim 20, wherein

said gradation processing means determines a gradation processing function representing the display gradation of the brightness data based on the statistical quantity, and assigns the display gradation of the brightness data, based on said determined gradation processing function, to said one of the

obtained images.

24. A fluorescent-light image display apparatus as defined in claim 20, further comprising

bit-shifting means for bit-shifting the pixel values of said one of the obtained images when each of said pixel values is represented by data of 9 bits or more, so that each of said pixel values is represented by data of 8 bits or less, wherein

said statistical-quantity computing means computes the statistical quantity based on said bit-shifted data.

25. A fluorescent-light image display apparatus as defined in claim 20, wherein

the gradation processing means is capable of being turned ON and OFF.

26. A fluorescent-light image display apparatus as defined in claim 20, wherein

said statistical quantity is a combination of a plurality of values including an average of the pixel values or the largest pixel value.

27. A fluorescent-light image display apparatus as defined in claim 18, wherein

the color data is a chromaticity occurring in a color mixing system or a color appearance system, each being one of color specification systems.

28. A fluorescent-light image display apparatus as defined in claim 18, wherein

the brightness data is a degree of brightness according to

a color mixing system or a color appearance system, each being one of color specification systems, or luminance according to an image signal system.

29. A fluorescent-light image display apparatus as defined in claim 18, wherein

when combining the tissue-state image and the tissue-form image to form the composite-image, for cases in which the number of pixels of the two images differ, the composite-image forming means converts the number of pixels of each image to the number of pixels of one of either of the two images before forming the composite-image.

30. A fluorescent-light image display apparatus as defined in claim 18,wherein

said fluorescent-light image display apparatus is provided in a form of an endoscope provided with an insertion portion to be inserted into a living body.

31. A fluorescent-light image display apparatus as defined in claim 18,wherein

a light source of the stimulating-light is a GaN type semiconductor laser, and

the wavelength band of the stimulating-light is within the 400-420 nm wavelength range.

32. A fluorescent-light image display apparatus comprising

fluorescent-light image obtaining means for obtaining a fluorescent-light image based on strength of the fluorescent light emitted from a target area upon irradiation thereof by a

stimulating-light,

reflected-light image obtaining means for obtaining a reflected-light image based on strength of the reflected-light reflected from the target area upon irradiation thereof by a reference light, and

tissue-state forming means for assigning at least one of color data and brightness data to a computed-image based on said fluorescent-light image and forming a tissue-state image representing mainly the state of the tissue in the target area, and

tissue-form image forming means for assigning to said reflected-light image at least one of color data and brightness data corresponding to the color data and the brightness data assigned to said tissue-state image and forming a tissue-form image representing mainly the form of the tissue in the target area, and

composite-image forming means for combining the tissue-state image and the tissue-form image to form a composite-image, and

display means for displaying the composite-image formed by said composite-image forming means.

33. A fluorescent-light image display apparatus as defined in claim 32, wherein

the computed-image is based on the ratio of one to another of two wavelength components among a plurality of wavelength components of said fluorescent-light image, each of said wavelength

components representing a different wavelength band of fluorescent light.

34. A fluorescent-light image display apparatus as defined in claim 32, wherein

the computed-image is based on ratio between said fluorescent-light image and said reflected-light image.

35. A fluorescent-light image display apparatus as defined in claim 32, further comprising

statistical-quantity computing means for computing a statistical quantity of the pixel values of one of the obtained images, and

gradation processing means for assigning display gradation of the brightness data based on said statistical quantity.

36. A fluorescent-light image display apparatus as defined in claim 35, wherein

said statistical-quantity computing means computes the statistical quantity from a desired portion of said one of the obtained images.

37. A fluorescent-light image display apparatus as defined in claim 35, wherein

said gradation processing means computes a predetermined coefficient based on the statistical quantity, multiplies said one of the obtained images by said computed coefficient, and assigns said display gradation of the brightness data to said one of the obtained images that has been multiplied by the coefficient.

38. A fluorescent-light image display apparatus as defined

in claim 35, wherein

said gradation processing means determines a gradation processing function representing the display gradation of the brightness data based on the statistical quantity, and assigns the display gradation of the brightness data, based on said determined gradation processing function, to said one of the obtained images.

39. A fluorescent-light image display apparatus as defined in claim 35, further comprising

a bit-shifting means for bit-shifting the pixel values of said one of the obtained images when each of said pixel values is represented by data of 9 bits or more, so that each of said pixel values is represented by data of 8 bits or less, wherein

said statistical-quantity computing means computes the statistical quantity based on said bit-shifted data.

40. A fluorescent-light image display apparatus as defined in claim 35, wherein

the gradation processing means is capable of being turned ON and OFF.

41. A fluorescent-light image display apparatus as defined in claim 35, wherein

said statistical quantity is a combination of a plurality of values including an average of the pixel values or the largest pixel value.

42. A fluorescent-light image display apparatus as defined in claim 32, wherein

the color data is a chromaticity occurring in a color mixing system or a color appearance system, each being one of color specification systems.

43. A fluorescent-light image display apparatus as defined in claim 32, wherein

the brightness data is a degree of brightness according to a color mixing system or a color appearance system, each being one of color specification systems, or luminance according to an image signal system.

44. A fluorescent-light image display apparatus as defined in claim 32, wherein

when combining the tissue-state image and the tissue-form image to form the composite-image, for cases in which the number of pixels of the two images differ, the composite-image forming means converts the number of pixels of each image to the number of pixels of one of either of the two images before forming the composite-image.

45. A fluorescent-light image display apparatus as defined in claim 32,wherein

said fluorescent-light image display apparatus is provided in a form of an endoscope provided with an insertion portion to be inserted into a living body.

46. A fluorescent-light image display apparatus as defined in claim 32,wherein

a light source of the stimulating-light is a GaN type semiconductor laser, and

the wavelength band of the stimulating-light is within the 400-420 nm wavelength range.

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